ABSTRACT

The present invention relates to a 12th active filter capable of concurrently removing 11th and 13th harmonics in order to obtain a filter performance capable of removing 11th and 13 harmonics even when a filter capable of removing 11th and 13th harmonics is constituted using a compensation function. The 12th active filter capable of concurrently removing 11th and 13th harmonics is characterized in that a passive filter 7-1 formed of a condenser 7-1-1, an inductance 7-1-2 and a resistor 7-1-3 is formed of the phases A, B and C, and the passive filter 7-1 of each phase is formed in a three-phase structure in which a switch 7-3 and a voltage source converter 7-4 are connected through a transformer 7-2, and in the voltage source converter 7-4, V1 ~ V6 of a firing unit 7-7 are connected with the bases of the transistors of semiconductor devices V1 ~ V6, respectively, and a control unit 7-6 connected with a signal detection unit 7-5 is connected with the firing unit 7-7 for thereby removing 11th and 13th harmonics.